

## Recombinant Bovine S100A7/PSOR1 protein (His Tag)

Catalog Number: PDEB100011

**Note:** Centrifuge before opening to ensure complete recovery of vial contents.

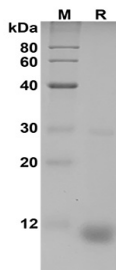
### Description

<b>Species</b>	Bovine
<b>Source</b>	E.coli-derived Bovine S100A7 protein Ser2-Gln101, with an N-terminal His
<b>Calculated MW</b>	10.9 kDa
<b>Observed MW</b>	11 kDa
<b>Accession</b>	Q28050
<b>Bio-activity</b>	Not validated for activity

### Properties

<b>Purity</b>	> 90% as determined by reducing SDS-PAGE.
<b>Endotoxin</b>	< 10 EU/mg of the protein as determined by the LAL method
<b>Storage</b>	Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80 °C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.
<b>Shipping</b>	This product is provided as lyophilized powder which is shipped with ice packs.
<b>Formulation</b>	Lyophilized from a 0.2 µm filtered solution in PBS with 5% Trehalose and 5% Mannitol.
<b>Reconstitution</b>	It is recommended that sterile water be added to the vial to prepare a stock solution of 0.5 mg/mL. Concentration is measured by UV-Vis.

### Data



SDS-PAGE analysis of Bovine S100A7/PSOR1 proteins,  
2µg/lane of Recombinant Bovine S100A7/PSOR1 proteins  
was resolved with SDS-PAGE under reducing conditions,  
showing bands at 11 KD.

### Background

S100A7 is a 11-12 kDa member of the S100 family of EF hand calcium binding proteins. Human S100A7 shares 32% amino acid sequence identity with mouse S100A7A, the closest related protein in mouse. It is acetylated at the N-terminus and binds both calcium and zinc ions. S100A7 is up-regulated in keratinocytes of psoriasis and atopic dermatitis lesions, as well as in epithelial cells of the tongue, eye, and female genital tract. Its up-regulation can be induced by bacterial exposure, inflammatory cytokines, or epidermal barrier disruption. S100A7 supports epithelial integrity through killing *E. coli* by sequestration of zinc and through inducing the up-regulation of tight junction proteins. The interaction of S100A7 with RAGE promotes the migration of immune cells and the infiltration of macrophages into tumor sites.